

AMENDMENT OF ABSTRACT:

Amend the abstract previously filed in this application as follows:

The invention relates to an apparatus for noninvasive determination of the oxygen turnover and data derived therefrom with an optical sensor (S) to be placed on the tissue with one or more light sources (W, L) which send light through the optical fibers to the sensor (S), one or more detectors (DD, DR) which receive light backscattered by the tissue through optical fibers, and an evaluation unit (Fig. 1).